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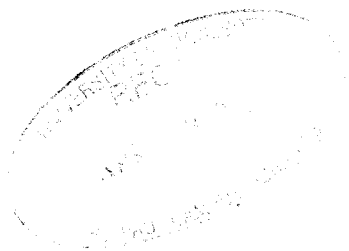
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JOURNAL OF RURAL COOPERATION



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The purpose of the Centre is to provide a framework for investigations and research on problems concerning rural cooperative communities and publication of the results, to coordinate the exchange of information on current research projects and published works, and to encourage the organization of symposia on the problems of cooperative rural communities, as well as the exchange of experts between different countries.

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Virtual Cooperatives in Brazil and the Globalization Process

by

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Abstract

Agricultural cooperatives in Brazil, as in other countries, develop through vertical integration in order to promote industrialization of the agricultural product and to aggregate the value of agricultural commodities. The vertical integration strategy was a predominant business planning adopted by Brazilian agricultural cooperatives in the 1980s. It was responsible for greater assets in cooperatives, larger agro industrial plants, and higher debt structure. Nowadays, it is possible to observe new agro industrial cooperative organizations in Brazil called “Virtual Cooperatives.” These virtual organizations do not possess significant assets or industrial plants, but represent a network that has a particular business strategy in the markets. In order to discuss virtual cooperatives, this paper describes the agricultural cooperatives in Brazil, the globalization process, and the institutional environment that has given rise to virtual cooperatives. The paper also describes the nature of a virtual cooperative, and the advantages and disadvantages when these organizations are compared to traditional agro industrial cooperatives. Two different virtual cooperatives cases studies are presented.

Evolution of the agricultural cooperatives in Brazil

Agricultural cooperatives in Brazil initiated activities in order to provide rural producers with bargaining power in a concentrated market. At first, this business strategy obtained best agricultural commodity prices for rural producers and also better price stability. After the initial period, the cooperatives showed many advantages, including bargaining power, and growth in important Brazilian agricultural regions. Producers of agricultural products such as milk, coffee, cotton, wheat and corn, gained greater benefits with the cooperative organizations (Bialoskorski Neto, 2000).

These organizations received important government incentives, credit with special subsidizing rates and technical assistance by official bureaus. During this initial period, the cooperatives were free to organize production and the credit cooperatives – credit unions – played an important role in rural development. This initial period started in the 1920s and continued till the 1960s.

Thereafter, the market and businesses demanded a more technologically advanced production structure. The bargaining power of the commodities market alone was not sufficient to guarantee better prices for the agricultural producers. During this period the agricultural industrialization process began to develop in Brazil. The cooperative organizations realized important growth. This included installing industrial plants to process agricultural commodities in order to receive differentiated prices and improved income to the associated rural producer.

Although it is a recognized aspect of the cooperative organization evolution in Brazil, we do not have enough data to confirm those indicators. In the milk market, the cooperatives organized a central cooperative targeting the production of better quality butter, cheese, and yogurts to be sold in supermarkets. In the soybean market, the cooperatives facilitated the improvement of the Brazilian production of soybean oil; they began the production of soy oil and export of soybeans to other countries.

Regarding the coffee industry, cooperative organizations raised the level of the processing plants and improved the quality of exported coffee. In the pork processing market, the cooperatives were instrumental in helping small producers to process competitively known brands in the pork market.

Other important areas of activity began to develop in the agricultural field as a consequence of the performance of cooperative organizations; such as the production and export of specialty flowers, fruits, and vegetables. In the 1980s, cooperatives invested in assets, production plants, transportation, technical assistance, and social services to cooperative members.

Bialoskorski Neto (2000) describes how cooperatives offered credit to the producers and improved the industrialization of agricultural commodities. As a result of that strategy, the agricultural cooperatives today represent an import part of the Brazilian agribusiness sector, that is more than half the Brazilian milk production, a third of soybeans export and a significant percentage of coffee agribusiness (Table 1).

Table 1. Cooperatives' production, in percent of the Brazilian total production

| Product | % |
|----------|-------|
| Cotton | 38.91 |
| Rice | 11.36 |
| Coffee | 27.97 |
| Corn | 16.68 |
| Soybeans | 29.40 |
| Pork | 31.52 |
| Wheat | 62.19 |

Source: Brazilian Cooperatives Organization (OCB), 1999.

During this period, the number of agricultural cooperatives decreased, although the size and number of rural producer members increased, due to mergers among

the cooperatives, principally in the state of São Paulo, the most developed region in Brazil (Tables 2 and 3).

Table 2. Number of agricultural cooperatives, total members, and member-average

| | Cooperatives | Members | Members per Cooperative |
|--------------------|--------------|---------|-------------------------|
| Brazil | 1,437 | 856,202 | 595 |
| State of São Paulo | 142 | 130,298 | 917 |

Source: Brazilian and São Paulo State Cooperatives Organization (OCB), 1999.

Table 3. Capital structure of thirty-four agricultural cooperatives in RECOOP – *Agricultural Cooperative Revitalization Program* – in the State of São Paulo (US Dollars)

| Activity | Revenue | Members | Total Assets | Revenue per Member |
|-----------|---------------|---------|---------------|--------------------|
| Poultry | 40,674,534 | 1,146 | 12,038,942 | 35,492 |
| Coffee | 114,066,535 | 9,360 | 66,267,408 | 12,186 |
| Sugarcane | 1,498,284,311 | 3,123 | 3,259,382,582 | 479,758 |
| Flowers | 81,090,518 | 262 | 133,957,365 | 309,505 |
| Grains | 199,992,472 | 8,215 | 188,345,039 | 24,344 |
| Input | 51,827,348 | 11,982 | 48,333,573 | 4,325 |
| Dairy | 531,999,955 | 10,621 | 200,608,723 | 50,089 |
| Total | 2,517,935,673 | 44,709 | 3,908,933,634 | 56,318 |

Source: São Paulo State Cooperatives Organization (OCB), 1999.

The organizations fast growth gained a favorable position in the international market, with less cost, better logistic position and favorable infrastructure for processing and exporting agricultural commodities.

However, this business strategy, using greater investments, allied to the Brazilian macro economic problems and high inflation rates, brings the cooperative organizations to a different and dangerous debt level, also due to high interest rates. Because of this situation, the government implemented a special program entitled RECOOP – *The Agricultural Cooperatives Revitalization Program* – to review the agricultural cooperative debt level and to aid the agricultural cooperative system.

Today, agricultural cooperatives in Brazil find themselves in a complex situation of structural adaptation to the competitive pattern of internal and external markets. Through the RECOOP, they are able to negotiate and stretch debts, promoting the investment resources inclusion side by side with an adequate administrative and cost structure.

The globalization process and cooperatives

The globalization process impacts the cooperative organizations, which require another kind of competitive strategy. Special problems are evident: first, with minor

international prices of agricultural commodities for export, and second, with the impact of minor internal market prices as a result of the import of agricultural commodities. This fact may be explained as a consequence of internal market protection in developed countries that causes problems with prices in less developed nations.

The free market global process that obligates weak nations to open their economies before trans-national enterprises causes some problems, such as higher unemployment rates and the closure of firms that could not compete at the same level of competitiveness and prices.

In this process, cooperative organizations that have adapted to the new market logic could lose the capacity to contribute income and welfare to the community, and not be able to ensure economic advantages to the members; the cooperative could not survive in this difficult economic condition.

Levi (2000) indicates, in contrast, that global financial markets possess a different logic from cooperative organizations, that the cooperative structure could possibly be responsible for preserving the actions or objectives of the majority of the members and the welfare of the community welfare, not only the market objectives. This fact implies that cooperative organization could survive in the globalization process and preserve the social objective if the organization exhibits an intense social cohesion.

The market logic, then, is not a cooperative or social one. Cooperative organizations have a number of different points of view: first, the need to maintain members' income, best prices, and economic efficiency, and second, the need to offer alternatives to social misery and unemployment, aiming at social community welfare.

In Brazil, because of the free market logic in the globalization process, the agricultural cooperatives underwent clearly different consequences of enterprise development: 1) there were firms that closed productive activities or maintained the production with several debt levels; 2) there were small cooperatives that only attempted to achieve the members' social welfare, in poor communities or land reform areas; they were directed to a limited or specific local market or received financial aid from governmental or non-governmental agencies; 3) there were cooperative organizations, developed through merger or conglomeration, that were established in competitive markets; they presented complex administration problems, greater numbers of members, financial strategies and focussed on market logic rather than social welfare; and, lastly 4) there were special groups, formed by elitist and highly educated members, that created cooperative organizations with a free market logic, attempting economic efficiency, accepting capital risk, and employing new informational tools to compete in the markets.

A small group of elitist producers with higher educational levels, established, since 1998, the last type of cooperative organizations, also called virtual cooperatives. These organizations survive successfully in free markets, and, apparently, do not

show problems with the globalization process. The cooperative doctrinal bases and ideas are preserved inside the group: one-man-one-vote, the egalitarian perspective, and the social welfare objective.

The globalization economic process impacts open economies and its organizations and has possible conditions for implementing new types of cooperative enterprises also with the market logic inside the organization. The economics environment is changing therefore, the cooperative enterprises are being transformed as well.

The virtual agricultural cooperative

Agricultural cooperative groups in Brazil, motivated by the agricultural commodity aggregation value, experienced an intense vertical production process, which introduced a heavy and expensive production infrastructure as a direct consequence of high investments.

Those investments were historically applied to the soybean processing plants – directing the soybean oil production; to coffee storage and the processing structure, production transportation; and to the milk cooperatives regarding cooling structures and dairy production.

A necessary larger cooperative management structure was a consequence of all those investments. The cooperative organizations were obliged to invest in professional managers, departments and employees for the operation as well as management of the operational plants. These investments resulted in higher costs in the cooperative management, which were not always compensated by relative growth in the prices of the export product in a semi-manufactured form.

Because of the high costs of operating the traditional structures, a new movement to form cooperatives appears in Brazil, without assets, processing and distribution networks of its own. Those organizations end up with no cost advantages in the size and scale economy. Their goal is to save maintenance costs or investments in their own assets, employees, a management body and scale of enterprise.

The so-called virtual cooperatives are cooperative organizations recognized by their small number of associated rural producers, between twenty and thirty producers, who do not possess a building nor have administrative expenses. They manage a small number of agricultural commodities, with highly differentiated quality levels that are directed to internal market niches. These market niches ensure a better remuneration from commercialized products, once they are administered by more rigid and specific quality standards, guaranteeing the buyer a higher quality product.

These cooperatives are called virtual cooperatives because they have neither headquarters nor industrial parks and because they have started an internal process, even though gradual: computerization of all activities in order to make most of the

contacts with associates, buyers and suppliers through virtual communication.

Villela (2000), in recent studies in the USA, reports that in that country, from 1997 to 1999, the growth of farms connected to the Internet was 13 percent to 29 percent, totaling more than 600,000 interconnected farms in the world wide web.

In São Paulo State, the most important and rich state of Brazil, in 1996 only 3 percent of farms had a PC (personal computer). The estimate, however, is that the USA will have about 80 percent of its farms connected to the Internet by 2003, indicating a new and different business environment. In Brazil, studies show that 80 percent of the US\$ 8 billion in farms business by 2003 will concentrate on business originated in the Internet, in one or another market involvement. The virtual cooperatives are preparing for a new concept of business and administration.

With regard to the financial structure of these new cooperatives organizations, it should be realized that there is a different logic in the financial strategy, once the fixed assets are no longer considered. The virtual organization could transact in markets, at the best price levels, or stop its transactions in the markets, if the price stimulus is not appropriate. This is a special condition: no transactions in markets and the cessation of productive activities for a limited time. Virtual cooperatives do not have the financial problems to maintain infrastructure, nor do they have fixed assets or an independent administrative structure.

If prices and results do not compensate the cooperative, it ceases to exist momentarily and returns to business only when better market conditions for the cooperative organization exist. In such cases, it is possible for the agricultural producer to achieve better market conditions with lower costs.

Rural groups that are participants in the best technological Brazilian producers form these cooperatives. They have access to financial rural credit systems, to new markets and technological international information. They clearly understand the market importance and its rules, and have an excellent educational level. In other words, these producers belong to the Brazilian rural elite.

Associates in virtual cooperatives are rural producers owners of their own land, particularly near urban centers, the best soil, excellent houses with TV, cellular phones, PCs, and a large infra-structure, such as green-houses or machinery, with family access to city facilities as schools, cinema, and shopping. The geographical region in São Paulo State where the virtual cooperatives are located has income levels and a socio-economic index similar to Europe or the United States, and is referred to as "Brazilian California". These rural producers are individual managers with rural employees; only the commercial business structure is collective, yet it is a cooperative system.

The relations among members are ethical and transparent. The few members in the virtual cooperative have special contractual relations that preview the free business transaction with the cooperative. There is no obligation for the members to

maintain any kind of transaction with the cooperative and there is no obligation for the cooperative organization to receive members' production. The member only enters the virtual cooperative if it is advantageous: the virtual cooperative only receives production of a particular member and sends the product to the buyer if the venture is economically viable for the virtual cooperative.

Mutual business contractual obligations do not exist between the cooperative and the member, only the commitment with the buyer (client), for quality products, delivered on time, at the lowest market prices, and arrangement with the member to place his product in the market, on time, with the highest market remuneration. The virtual cooperative is a truly market-oriented organization; the commitment is established with the market logic and not with the member.

Analysis of businesses, financial, and property rights

Fulton (1995) approaches the problem of property rights distribution in cooperatives, as a collective organization. In cooperative enterprises there are no clear rights concerning financial results, consequently problematic contractual opportunistic relations may obtain between members and the organization.

In other words, members' uncertainty occurs since in collective organizations the investments or proportional distribution of financial resources take place only after the general assembly. In this case, it is probable that the individual objective – for example: obtaining financial results in cash – could be substituted by the collective objective, for example, a new cooperative investment. Thus, the individual and expectation must be subordinate to the collective ones. For the associated producer there is no advantage or clear individual property right of cooperative financial results.

A New Institutional Economics tool shows that if there are large numbers of members in agricultural cooperatives, the organization will likely have more problems with the monitoring process, as well as high transaction costs for contractual relations. These problems occur because of difficulties in the decision-making process. Asymmetric information problems exist, and this makes it more expensive for the cooperative to organize the participation process. In the USA there are alternatives to resolving these problems called New Generation of Cooperatives. These possibilities are directed to minimizing transaction costs of the monitoring process with price incentives for members and a different financial statement on investments (Cook, 1995). In these types of cooperatives the financial results are always distributed by price policies. Only after, the investments are considered by the collective organization.

Virtual cooperatives have some important characteristics; first, there are no fixed assets in buildings or infrastructure, and the distribution of property rights is different from that of traditional cooperatives. Second, in these cases, the resulting distribution

is very important to the associated income, because of the price risk and the absence of assets. Third, in the virtual cooperatives there are no traditional guarantees for bank loans, like fixed assets or another type of capital, and fourth, in consequence, the capital of each associate is fundamental to improving the cooperative business.

The organizational form is the same as that of other cooperatives, but virtual cooperatives are formed by a lower number of associates, twenty to forty cooperators. It is possible to have a general assembly each month with a larger presence of cooperators and to discuss organizational problems and business strategies with less informational asymmetry and more participation.

In these cases, it is possible to guarantee a special quality product for consumers, the cooperative organization knows each of its cooperators very well, as well as the productive structure, quality and quantity. It is then possible to know exactly when the cooperative will have a specific product, at which quality and quantity.

Relations with customers are more stable, through an informational system in special Internet electronic commerce; the cooperative organization offers its products, flowers, or grains for sale through electronic auctions. The cooperative knows the customer and the consumer knows the cooperative and its quality very well.

In terms of cost analysis, it is possible to see that in traditional cooperatives, investments are made in processing plants and storage areas which suffer depreciation; there are higher managerial costs, with a non-occupation associated cost. In comparison, in virtual cooperatives there are other costs such as rental of storage space and infrastructure, expenses for generating and transacting information, with an additional price risk.

The life horizon of a virtual cooperative is considered a business probability, since this organization can disappear or only cease its activities for a determined moment in the future. These ideas could be applicable to the virtual cooperatives because the organization does not need to amortize investments or debts. The cooperative will continually re-evaluate its presence in the market at any moment.

A different analysis can be made when comparing traditional cooperatives – which are considered low risk for the producers – and the virtual cooperatives – which are considered high risk to the associated producer, according to the usual financial analysis (Copeland and Weston, 1992).

Consider $E(Ct)$ as an expectation of return to the associate in a traditional cooperative, and $E(Cv)$ as an expectation of return in a virtual cooperative, Rt could be considered the income return in a traditional cooperative organization with low risk in time. On the other hand, Rv is considered the income return in a virtual cooperative organization with risk, and β could represent the probability of earning income. One has to consider the fact that they are in the same agricultural sector.

The rural producer who avoids risk should prefer $E(Ct) = Rt$, independently from β , despite the probability that the income return from the traditional cooperative is

lower than that of virtual cooperatives, $R_t < R_v$, however, this income, occurs at all times with the same frequency.

Moreover, the entrepreneur rural producer, who is neutral or is willing to take the risk, will accept $E(C_v) = R_v\beta$ with the probability of β occurrence of a larger differential income return, if that return is on average, over time, higher than what is obtained in the traditional cooperative. In other words, the rural entrepreneur producer accepts the game and the risk, with the expectation of major gains, if there is no uncertainty about property rights for cooperative income.

In these cases, only entrepreneur producers who enjoy business risk and prefer some probability of more income in future accept transactions in virtual cooperatives. It is possible to observe that cooperative educational levels in virtual cooperatives are more developed than in traditional cooperatives.

Comparative case studies on Brazilian virtual cooperatives

Two virtual cooperatives in the State of São Paulo, Brazil, were the subject of a study. The first one CooperFlora, in the town of Holambra, which commercializes flowers; the second is called CAV - Virtual Agricultural Cooperative, and operates in the town of Batatais selling grains – soy and corn.

CooperFlora

The Cooperative was founded in September 1999 after Holambra, a traditional flower trade cooperative, encountered a financial crisis resulting in the lay-off of high qualified employees. Twenty-five best flower producers, who were part of the Dutch community in Brazil founded CooperFlora, in collaboration with the veteran cooperative qualified employees. About 60 percent of those producers were college graduates and the remaining 40 percent were high school graduates; these are excellent levels of education in the Brazilian reality. Comparing CooperFlora's revenue (US\$7.9 million) to that of a traditional flowers cooperative (US\$33.8 million with 160 members), CooperFlora's members earn an average revenue of approximately 47 percent higher.

CooperFlora, as stated in its statutes: cannot hold any assets such as buildings or industrial plants; it does not have any employees, its existence is merely "virtual". In order to administer the business there is a contract with Flora Net, a company that operates the cooperative marketing administration using a computerized system. It is important to notice that there is a marketing system, which is similar to a small auction and occurs in an Internet and virtual web, aiming to become a true flower e-commerce.

As a result, the cooperative sets an average price that is higher than that of the traditional cooperative: estimated at about 7 percent, where 1/3 of that difference is due to significantly lower operational costs and 2/3 as a consequence of a better

quality product. This is due to refined classification and market niches the virtual cooperative is able to reach.

The location where the merchandise is received is rented by the cooperative, the transportation is subcontracted, and a specialized company performs the business management. The producers meet frequently to establish acting strategies for the virtual cooperative, with 100 percent attendance by the members.

There is no obligation from the associates towards transacting with the cooperative. In the absence of one product or absence of quality, FloraNet is authorized to transact with third parties to meet order requirements. This particular strategy motivates CooperFlora's associates to produce the desired quantity and quality. If this level is not sufficient, the cooperative does not receive its production and will then start negotiations with non-cooperators. FloraNet is always interested in selling at a better price. By doing so, it will guarantee its revenue: managers and dealers' salaries are proportional to the system performance. This guarantees an excellent level of reliability in its business administration.

The cooperator's contractual enforcement of loyalty is substituted by the free transaction ethics. It is important to note that if CooperFlora's price is not the best; the associate can easily transact with Holambra, a Dutch community cooperative, with a traditional marketing system, which includes a specialized auction, used in the flower commercialization market.

Cooperflora is expanding its business, but has no intention of increasing the number of associates or entering a vertical process such as the traditional cooperatives. It could preserve its transaction cost advantage. Since it is monitored by the members, it is a more flexible process.

CAV – Virtual Agricultural Cooperative

The CAV - Virtual Agricultural Cooperative, formed by twenty associates, was founded at the end of 1998. The cooperative, because of its statutes, cannot have assets such as buildings or storage areas, and its functioning is also virtual.

It operates with soybeans and corn, and because of its localization and the high technological level of its associates, it has a superior product quality; its buyers do prefer to negotiate with it. The cooperative rents storage and marketing areas.

There is no obligation on the part of the cooperaters to conduct business with it, and some of its associates are also members of another traditional cooperative. However, because of the price advantages received, not only the associated producers but also third party producers market their production with CAV, which clearly shows a tendency of growth.

The expansion process is planned in two ways: first, by formation of an organization with a professional managerial team to run the business, and second, by establishment of an already operating computerized infra-structure so the associates are able to generate on-line information in order to negotiate grains via e-commerce.

Presently, the prices received by the rural producers are systematically higher than those of traditional cooperatives: the average estimated difference is about 3 percent to 6 percent, due to lower costs, better grain quality, logistic advantages and a better sales effort. If the mentioned difference did not exist, there would be no reason for the existence of the cooperative operation, and the associates could easily pass production to another cooperative.

Comparing a traditional cooperative with a high industrial level cooperative that processes and exports soybean oil, its administrative costs, depreciation and operations end up being higher than CAV's, since in addition to production processing, the cooperative also sells raw materials, offers technical assistance, and enables crop financing.

CAV operates exclusively in the national grain market. During the initial phase of its virtual activities, the associates meet frequently and there are meetings (assemblies) every two months, with the participation of all the cooperative members. The size of the cooperative allows flexible and fast market positioning with excellent coordination among the associates.

The computerization process is still incipient. The systems continue to be assembled and assessed. This cooperative is considered virtual because it does not have headquarters nor real estate. It intends to start an information net among its associates, establishing e-commerce in the near future.

Final considerations

It is possible to consider the impact importance of the globalization process on agricultural cooperatives in Brazil. This affects the reorganization of agricultural activities and in consequence, also the cooperative organizations. Some firms stopped their activities or started new strategies, for example: mergers and fusions. Other cooperatives, which grew competitive in the market and in the number of members, at times show debt problems. Small cooperatives, established in poor areas or land reform plants, showed different strategies, focusing on social relations, and members' welfare, and not on the markets, frequently depending on governmental or non-governmental financial aid.

A small number of elitist groups with high educational levels on the other hand, form a new type of cooperative organization, called virtual cooperatives, which have market performance and an economic efficiency logic. They not only survive in the competitive global market, but also represent the capacity of obtaining economic advantages in the globalization process. One can consider that the so-called "virtual" cooperatives are, in reality, enterprises derived from an alliance of interests. Because of the absence of loans and assets, the rural producers have no contractual loyalty commitments nor do they depend on the cooperatives. Any transaction and relationship receives immediate and direct price incentives.

Therefore, only the best price incentives, which pay the risk of the producers operating that type of enterprise, are responsible for stabilizing the interest's coalition and maintaining the cooperative's operation. The advantage of a reduced number of members, who attend meetings frequently, allows information asymmetries inside the group to be reduced, and the ethical relations to grow proportionally among the group participants, with clear reduction in the transaction costs.

The advantages of the cost reduction are evident, but there is also evidence that the best prices, in the two case studies, occur intensively due to a better quality product, or also as a consequence of a better effort upon marketing the product and identifying market niches.

This probably happens due to the reduced size, smaller information asymmetry among associates, and also because of better treatment and perception of market information. This allows for identification of seasonal opportunities and market possibilities. Efficiency also relates to sub-contracting professional services, which eventually share risk and benefit, thus acting as a permanent incentive in meeting better results for the cooperative as well.

Therefore, the virtual agricultural cooperative experience in Brazil can be seen as important, considering that several positive aspects must be distinguished and adapted to the traditional cooperatives, changing the organizational architecture and the position of the enterprise in the market.

But it is possible to argue, in conclusion, that this kind of organization is probably not an ideal, social or doctrinal cooperative organization. It possibly means that this kind of organization could represent a transformation of market logic for cooperative firms. Then, the globalization process, allied with the market logic, impacts agricultural cooperatives and induces a new logic in social enterprises.

The collective action for the economic welfare in poor communities, following the introduction of the globalization process, introduces an old social-economic dichotomy, or the conflict of social and economic objectives in the cooperative organization.

In other words, what kind of economic efficiency, contractual relations, and organizational architecture could improve social benefits without jeopardizing the cooperative doctrinal ideas?

Another question to be considered, at the end of this discussion, is whether virtual cooperatives, as a type of elitist organization, are only a temporary consequence of the globalization process, or is this an initial process with future consequences?

A final doubt possibly exists, which is: could this kind of organization be approved to solve a social problem in developing countries, with a transparent cooperative structure, or is it merely a lecture of market economics for the cooperative organization? Does it represent a future danger for social cooperative organizations? To answer these and related questions, more discussions, analysis, research and

a determinant observation of cooperative organizations before the globalization process, are necessary.

References

- Bialoskorski Neto, S. Changes in the Brazilian Social Economy and Institutional Environment in the Co-operatives Development. Working Paper. University of São Paulo, FEA-RP, 2000.
- Cook, M.L. "The Future of U.S. Agricultural Cooperatives: A Neo-Institutional Approach." *American Journal of Agricultural Economics*, 1995, 77:1153-1159.
- Copeland, T.E. and Weston, J.F. *Financial Theory and Corporate Policy*. MA: Addison-Wesley Publishing Company, 1992.
- Fulton, M.E. "The Future of Canadian Agricultural Cooperatives: A Property Rights Approach." *American Journal of Agricultural Economics*, 1995, 77:1144-1152.
- Levi, Y. "Globalization and the Cooperative Difference". This issue.
- OCB – *Brazilian Cooperative Organization: Annual Statistics*. Brasilia: OCB, 1999.
- Villela, P. Internet Impact on Agribusiness. Annals. Agricultural Informational Meeting. Juiz de Fora, 2000.